

II. Amendments to the Specification

Please amend specification paragraphs [0006], [0010], [0036], and [0067] of the present application as follows:

[0006] In general, the present invention is directed to a medical instrument, such as a cannula or sheath, that includes a housing having a housing member with a passage through which a catheter is inserted. A valve body is mounted in the housing and abuts the housing member at an end of the passage, and, as the catheter penetrates through the valve body, the valve body conforms to the outer wall of the catheter to maintain a fluid tight seal between the valve body and the catheter.

[0010] In any of the forgoing implementations, when the valve body is unstressed before being mounted in the housing so as to abut the housing member at an end of the passage, the valve body has a first planar dimension and a second planar dimension that is less than the first planar dimension. Thus, the peripheral edge is non-circular when the valve body is unstressed. For example, the peripheral edge can have an oval shape before the valve body is mounted in the passage housing.

[0036] Referring now more particularly to the drawings, there is illustrated in FIGS. 1 and 2 a hemostasis cannula which includes a cannula housing or housing 10 having a housing member or member 12 including a passage 11 therethrough adapted to receive a catheter. Housing 10 is made up of a housing member or member 12 having has an abutting surface 13 and two externally threaded surfaces 15 and 16. A cap 17, which includes recess 18 and defines an internal wall 19, is threaded down on the member 12 on the threads 15 and is glued in place by a suitable cement or the like. Valve body 1 is received into recess 18 and is sandwiched or disposed between sections of wall 19 in cap 17 and abuts housing member 12. As can be seen in FIGS. 1 and 2, the face 6 including the cylindrical recess or hole 3 of valve body 1 is directed towards the opening 70 of the cap 17.

[0067] In operation as shown in FIGS. 3 and 4, a hollow needle subcutaneously enters the blood vessel. When the lumen 62 of the vessel has been penetrated, guide wire 61 is threaded into the needle and blood vessel, and the needle is removed. A hollow plastic dilator 56 is then passed through passage 11 of the cannula housing member 12 and is slid over guide 61. The physician then dilates the hole through the vessel wall by maneuvering the tapered end 60 of the dilator 56, and introduces the entrance tube 35 into vessel lumen 62. It should be noted that the outer diameter of the dilator at its constant diameter portion is close to the outer diameter of the flexible tubing 35 so that tubing 35 is guided through the wall of the vessel by the dilator. The cannula is then taped into position on the body of the patient. With the feed tube 46 fastened to projection 47, and while maintaining a slow flow of heparin saline solution into passage 11 through the tube 46, the physician withdraws dilator 56 and guide 61. At this point, slit 2, 2' or 2" in valve body 1, 1' or 1", respectively, closes. The closure of slit 2, 2' or 2" insures that no air passes through the opening 70 of cap 17 and through valve body 1, 1' or 1" into passage 11. Thus, the present device not only prevents blood loss but also insures against the possibility of an air embolism.